

Assessing the Knowledge, Attitude and Practices on Cervical Cancer Screening among Women of Reproductive Age Attending Gynecology clinic in Hoima Regional Referral Hospital

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ABSTRACT

Cervical cancer incidence in Uganda is three-times that of the global average and is a leading cause of mortality. This study assessed the knowledge and attitude on cervical cancer screening among women of reproductive age attending Hoima regional referral. This was cross sectional study on 343 women of reproductive age using questionnaires. Majority of participants who utilized cervical cancer screening were aged 26-30 (54.3%), married (68.6%), had at least secondary education 60.0%, were catholic 48.6%, had formal employment, had knowledge 77.1%, and had good attitude 82.9%. Knowledge about cervical cancer is among the most important aspects in fighting this disease and has a big influence on attitude towards seeking for screening.

Keywords: Cervical Cancer Screening, Knowledge and Attitude, Women of Reproductive Age, Uganda, Cross-Sectional Study

INTRODUCTION

Cervical cancer ranks fourth globally among cancers that affect women, with an estimated 604,000 new cases in 2020. According to Sung et al. [1], about 90% of the 342,000 cervical cancer fatalities predicted for 2020 will occur in low- and middle-income nations. Cervical cancer begins in the cells of the cervix. Before cancer develops, the cells undergo a process called dysplasia, during which abnormal cells start to appear in the cervical tissue [2]. Cervical cancer typically progresses slowly over time. If these abnormal cells are not eliminated, they may eventually develop into cancer cells, proliferate, and spread further into the cervix and adjacent tissues [3]. Cervical cancer is characterized by the uncontrolled proliferation and division of cells that make up the cervix. Persistent infection with highly infectious types of Human Papillomavirus (HPV) 16 and 18 is believed to be the primary cause of the disease in most cases [4]. The HPV virus primarily invades cervical epithelial cells and then undergoes a non-viremic infection cycle under the influence of various potent viral oncogenic proteins, namely E6 and E7. It takes 15 to 20 years for cervical cancer to develop in women with normal immune systems. However, in women with weakened immune systems, such as those with untreated HIV infection, it can take only 5 to 10 years [5]. The incidence of cervical cancer in Uganda is three times the global average and remains a leading cause of mortality [6]. Fewer than one in ten women have been screened for cervical cancer in the last five years in Uganda [7]. The country has a population of 13.1

million women aged 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year, 6,959 women are diagnosed with cervical cancer, and 4,607 die from the disease. Cervical cancer ranks as the most frequent cancer among women in Uganda and the leading cancer among women aged 15 to 44 years. Approximately 3.6% of women in the general population are estimated to harbor cervical HPV-16/18 infection at a given time, and 57.0% of invasive cervical cancers are attributed to HPV 16 or 18 [8].

A considerable proportion of women have inadequate knowledge and attitudes regarding cervical cancer screening [9]. A study reported that only 34.4% of women had adequate knowledge, and 27.8% practiced cervical cancer screening [10]. While 70% of women in a study had heard about cervical cancer screening, only 11.3% had adequate knowledge, and 46.6% had a positive attitude towards screening [11]. Another study on cervical cancer screening knowledge found that most women who underwent screening had prior knowledge of cervical cancer, knew someone diagnosed with the disease, and cited health professionals as their primary source of information on screening [12]. Yimer et al. [13] found that women who were aware of cervical cancer were nearly five times more likely to use cervical cancer screening services than those who were not. Studies have shown that raising awareness about cervical cancer screening is a priority in resource-limited countries. The attitude of women towards screening is a crucial factor, as it

<https://www.inosr.net/inosr-experimental-sciences/> determines whether they choose to undergo screening or not. However, several factors influence women's attitudes, which in turn affect screening uptake. Jassim et al. [14] found that, due to religious and conservative cultural aspects, most participants expressed feelings of embarrassment if examined by a male doctor and were denied screening if they were single. While few participants were discouraged from cervical screening by their partner or friends, this study failed to determine the reasons for this finding. Another study cited fear of discovering a serious disease as a major cause of negative attitudes towards screening. However, this fear reflects a poor

Study Design

This research was a hospital based cross sectional description design.

Study Area

The study was carried out at the gynecology clinic and ward, post-natal ward and antenatal clinic.

Study Population

All women of reproductive age attending Hoima regional referral hospital.

Inclusion Criteria

All women of reproductive age who attended the gynecology clinic that and consented to the study.

Exclusion criteria

Women already diagnosed and screened, and with disability that rendered them unable to answer the questionnaire.

Sample Size Estimation

I used the kish Leslie formula for sample estimation.
 $n = z^2 p(1-p)/e^2$ n = estimated minimum sample size required
 p = proportion of a characteristic in a sample
 $z = 1.96$ (for 95% confidence interval)
 e = margin of error set at 5% $p = 33.6\%$ [17]
 $n = 1.96^2 \times 0.336(1 - 0.336)/0.05^2$
 $n = 343$ women

Study Variables

Independent variables include socio-demographics such as age, occupation, income earning, education, distance from health center

Intervening variable include Knowledge (Good or Poor), attitude (Good or Bad).

Socio-demographic

Majority of women were aged 26-30 (30.0%), married 61.5%, secondary education 58.6%, catholic

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understanding of the natural history of cervical cancer and the principles behind cervical cancer screening. This suggests that the acceptability of cervical screening could be significantly improved if women were adequately informed [15]. Cultural beliefs and attitudes have been identified as barriers to cervical screening across various studies. The cultural belief that the lower genital tract is sacred and should only be shared with husbands was prevalent in the literature. This belief prevents some eligible women from accessing cervical screening services [16].

METHODOLOGY

Dependent variable such as cervical cancer screening

Sampling Technique

Simple random sampling technique was used

Data Collection methods

Respondents were interviewed using structured questionnaires. The researcher subjected the questionnaires to eligible consenting individuals to generate the data.

Data Analysis

Data was coded, cleaned, and, entered into the computer using Microsoft Excel and then analyzed using SPSS version 20. Descriptive statistics were presented in form of frequency tables, charts, and graphs.

Quality Control

Data collection tools were pre-tested outside the study area to ensure accuracy and consistency. Data collection tools were checked for completeness and accuracy and stored safely after each field day. The chief researcher gave training to the data collectors a week prior to the study.

Ethical consideration

All the required permissions to carry out research was sought from the research and ethics committee of KIU, as well as the hospital administration. Before collecting data, consent was sought from the respondents. Respondents were interviewed individually to ensure privacy.

RESULTS

57.4% and housewives 66.2% as shown in table 1 below.

Table 1: showing social demographic responses

Variable	Category	Frequency(N=343)	Percentage (%)
Age	21-25	152	44.3
	26-30	103	30.0
	>31	88	25.7
Marital Status	Single	132	38.5
	Married	211	61.5
Education	No Formal Education	11	3.2
	Primary	131	38.2
	At Least Secondary	201	58.6
Religion	Catholic	197	57.4
	Anglican	98	28.6
	Muslim	48	14.0
Occupation	Housewife	227	66.2
	Peasant	79	23.0
	Formal Employment	37	10.8

Association between Socio-Demographic and Cervical Cancer Screening Uptake

Majority of participants who utilized cervical cancer screening were aged 26-30 (54.3%), married (68.6%), had at least secondary education 60.0%, were

catholic 48.6%, and had formal employment as shown in table 2 below.

Table 2 Showing association between socio-demographic and cervical cancer screening uptake

Variable	Category	Frequency(n=35)	Percentage (%)
Age	21-25	6	17.1
	26-30	19	54.3
	>31	10	28.6
Marital Status	Single	11	31.4
	Married	24	68.6
Education	No Formal Education	2	5.7
	Primary	12	34.3
	At Least Secondary	21	60.0
Religion	Catholic	17	48.6
	Anglican	9	25.7
	Muslim	9	25.7
Occupation	Housewife	7	20.0
	Peasant	3	8.6
	Formal Employment	25	71.4

Knowledge about Cervical Cancer Screening

Majority of participants had poor knowledge 71.7% as shown in table 4.3 below.

Table 3: Knowledge about cervical cancer screening

Variable	Category	Frequency(n=343)	Percentage (%)
Knowledge	Good	97	28.3
	Poor	246	71.7

Association between Knowledge and Cervical Cancer Screening.

Most participants who utilized cervical cancer screening had knowledge 77.1% as shown in table 4.

Table 4: Association between knowledge and cervical cancer screening

Variable	Category	Frequency(n=35)	Percentage (%)
Knowledge	Good	27	77.1
	Poor	8	22.9

Attitude towards Cervical Cancer Screening

Most participants had a poor attitude towards cervical cancer screening 68.2% as seen in the table below.

Table 5: Attitude towards Cervical Cancer Screening

Variable	Category	Frequency(n=343)	Percentage (%)
Attitude	Good	109	31.8
	Poor	234	68.2

Association between Attitude and Cervical Cancer Screening.

Most participants who utilized cervical cancer screening had good attitude 82.9% as shown in the table 6 below.

Table 6: Association between attitude and cervical cancer screening.

Variable	Category	Frequency(n=35)	Percentage (%)
Attitude	Good	29	82.9
	Poor	6	17.1

DISCUSSION

Majority of participants who utilized cervical cancer screening were aged 26-30 (54.3%), married (68.6%), had at least secondary education 60.0%, were catholic 48.6%, had formal employment, had knowledge 77.1%, and had good attitude 82.9%. These results are consistent with results of other researchers. Yimer *et al.*, [13] found out that women who knew about cervical cancer are nearly five times more likely to use cervical cancer screening than those who did not. Studies have shown that awareness about cervical cancer screening is priority in resource -limited countries. Concerning pap smear, a high level of education was significantly associated with increased awareness of pap smear but not its uptake among respondents, whereas prior counseling by doctors/nurses about cervical cancer and knowing someone who has cervical cancer significantly increased both the awareness of pap smear and the uptake of pap smear. Therefore, physician recommendation was identified as a major determinant of health practices of individuals which are usually multifactorial in nature [18].

A study about knowledge, attitude, and practices regarding cervical cancer screening, knowing about

pap smear was not influenced by education and employment [14].

Attitude is influenced by understanding of a situation therefore information is a very important aspect in determining attitude towards cervical cancer screening. Moreover, this suggests that the acceptability of cervical screening could be high if women were simply informed [15]. The attitude of women towards screening is a very important aspect because it determines if they take up the screening or not. However, several factors influence attitudes of several women which in turn affects the screening. [14], found in his study considering the religious and conservative aspects of certain cultures, the majority of participants expressed their feeling of embarrassment if examined by a male doctor, and had been denied screening if single. Few participants were discouraged from cervical screening by their partner or friends, however, this study failed to determine the reason for this finding.

Another study cited that fear of discovering a serious disease was a major cause of negative attitude towards screening however, fear reflects a poor understanding of the natural history of cervical cancer and of the principle behind cervical cancer

<https://www.inosr.net/inosr-experimental-sciences/> screening. Moreover, this suggests that the acceptability of cervical screening could be high if women were simply informed [15].

Several women described cervical screening as an inconvenience, "I think it's just inconvenient, but it's something that we have to for like paying a bill you know the tax council is inconvenient" Women felt they had other priorities. A few ethnic minority women talked about potential shame if diagnosed with cervical cancer as a barrier to attending screening among others, particularly the older generation [19].

Cultural beliefs and attitudes have been identified as a barrier to cervical screening across literature. The

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cultural belief that the lower genital tract is sacred and a part of the body to only be shared with husbands and no one else was prevalent in literature. The topic of sex is taboo and not openly discussed by pacific women with men or inter generationally between younger and older women, making the discussion of cervical screening difficult for some pacific women. Shame and stigma have been associated with cervical screening because undergoing a cervical smear is seen as an indication of a woman's inappropriate sexual behavior. The belief prevents some eligible women accessing cervical screening services [20].

CONCLUSION

Knowledge about cervical cancer is among the most important aspects in fighting this disease and has a big influence on attitude towards seeking for screening. Health care providers and policy makers have a big job in working towards sensitization of women through health education and communication through different medias to improve

on the knowledge of this disease. Majority of participants who utilized cervical cancer screening were aged 26-30 (54.3%), married (68.6%), had at least secondary education 60.0%, were catholic 48.6%, had formal employment, had knowledge 77.1%, and had good attitude 82.9%.

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